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What is claimed is:

A method for identifying/a price at which to conduct a batch auction of a financial asset, comprising the steps of:

accepting a plurality/of order requests from a plurality of sources, said order requests containing orders representing a desire to trade the financial asset within certain order parameters, a portion of said orders optionally dontaining a desired order parameter;

selecting the pride at which to trade the asset by examining said priced bortion of said orders, including determining/from said priced portion of said orders whether there exists a single price at which a maximum number of shares of said asset will be traded, and, if so, selecting said single price as a selected price,

if there does not exist such a single price, calculating an imbalance ratio of purchase requests of said asset to sald requests of said asset, and determining the selected price based on the result of a comparison of said imbalance ratio to a predetermined reference value;

exchanging /a number of shares of the asset at the selected price; and

allocating said number of shares among said order requests.

The method for identifying a price at which to conduct a batth auction of a financial asset according to claim 1, Wherein said number of shares is a maximum number of shares which can be exchanged based upon said order requests.

- The method for identifying # price at which to
- 2 conduct a batch auction of a financial asset according
- to claim 2, wherein said maximum number of shares is a
- 4 factor for selecting the selected price.
- 5 4. The method for identifying a price at which to
- 6 conduct a batch auction of a/financial asset according
- 7 to claim 1, wherein the selected price lies within a
- 8 range identified by a bid-offer spread of the asset on
- 9 a market for the asset.
- 10 5. The method for ident fying a price at which to
- 11 conduct a batch auction df a financial asset according
- to claim 1, wherein said order parameters include a
- trade side, a security identifier, a price, and a
- 14 quantity of shares.
- 15 6. The method for identifying a price at which to
- conduct a batch auction of a financial asset according
- to claim 1, wherein said orders have order types
- 18 selected from the group consisting of unpriced orders,
- 19 cross orders, and priced orders.
- 7. The method for identifying a price at which to
- 21 conduct a batch auction of a financial asset according
- 22 to claim 6, wherein said cross orders comprise order
- 23 parameters including a security identifier, and a
- 24 quantity of shares and wherein said cross order
- represents a desire to directly exchange said quantity
- of shares at the selected price.
- 27 8. The method  $f \phi r$  identifying a price at which to
- conduct a batch auction of a financial asset according.
- 29 to claim 1, wher in said exchanged shares are allocated

- 1 pro-rata among said orders whose parameters are met by
- said selected price.
- The method for identify #ng a price at which to 9. 3
- conduct a batch auction of a financial asset according
- to claim 1, wherein said selecting step is performed 5
- according to an algorithm selected from the group 6
- consisting of a price dis $\phi$ overy algorithm and a 7
- reference price algorithm.
- The method for identifying a price at which to 9 10.
- conduct a batch auction of a financial asset according 10
- to claim 9, whereby said selected price is selected so 11
- as to maximize an amount of exchanged shares. 12
- A computerized system for identifying a price at 13 11:
- which to conduct a batch auction of an asset, 14
- comprising: 15
- a computerized network having one or more computers. 16
- in electronic communication with each other; 17
- 18 an order receivfing program running on one or more of
- said computers, wherein said receiving program is designed to receive a plurality of messages containing 20
- orders from one  $\phi$ r more qualified participants; 21
- an order book database located on one or more of
- said computers, wherein said order book database 23
- communicates with said order receiving program and 24
- 25 stores each of said orders received by said receiving
- 26 program;

- a price selection program running on one or more of 27
- 28 said computers, wherein said price selection program
- 29 refers to said order book database and calculates a
- selected pri $\phi$ e at which to transact a maximum number of 30
- shares of the security during the batch auction; 31

- a batch auction execution program running on one or more of said computers, wherein said execution program executes the batch auction of said maximum number of shares of the security at a given execution time at said selected price, and allocates said maximum number of shares of the security among said accepted orders according to a predetermined criterion.
- 8 12. The computerized system according to claim 11, 9 further comprising a notification program running on
- one or more of said computers, wherein said
- notification program notifies said qualified
- participants of results of said auction execution
- 13 program.
- 1 13. The computerized system according to claim 11,
- wherein said messages can contain order types selected
- from the group consisting of unpriced orders, cross
- orders, and priced orders.
- 1 14. The computerized system according to claim 11,
- further comprising an electronic connection for
- forwarding unexecuted orders to outside markets.
- 1 15. The computerized system according to claim 11,
- 2 further comprising communication connections whereby
- 3 said qualified participants may remotely submit said
- $^{4}$  . messages to said order receiving program
- 5 electronically.
- 1 16. The computerized system according to claim 15,
- wherein said qualified participants receive said
- 3 results of the batch auction electronically from said
- 4 notification program.

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- 1 17. The computerized system according to claim 11, 2 wherein said predetermined criterion comprises a pro-
- rata distribution of said maximum number of said shares
- among said orders having a price requirement at least
- 5 as aggressive as said single price.
- 1 18. The computerized system according to claim 11,
- wherein said price selection program identifies said
- single price according t $\phi$  a price discovery algorithm
- 4 and a reference price al/gorithm.
- 1 19. The computerized  $\phi$ ystem according to claim 11,
- wherein said single price is constrained to lie within
- the bounds identified by a bid-offer spread of the
- 4 asset on a market for the asset.
- 1 20. The computerized system according to claim 11,
- further comprising an electronic connection to an
- 3 external data source, said data source providing market
- information regarding the asset.
- 1 21. A method for conducting a security batch auction
- 2 cycle for an asset at a single price, said auction
- 3 cycle having an order acceptance period, a price
- 4 discovery period and an order execution period, said
- 5 method comprising the steps of:
  - during said order acceptance period, accepting requests to enter auction orders into an order book;
- during said price discovery period, determining whether said orders will intersect,
- if said orders intersect, identifying one or more
  prices at which the batch auction cycle would produce a
  maximum number of executed shares, selecting one of

said one or more prices as an optimal price, and setting said optimal price as the single price; or

if said orders do not intersect, selecting a reference price, and setting said reference price as the single price; and

during said order execution period, executing a trade of said maximum number of shares at said optimal price, and allocating said executed maximum number of shares among the orders according to a predetermined criterion.